

**DEER HERD UNIT MANAGEMENT PLAN**  
**Deer Herd Unit #27**  
**(Paunsaugunt)**  
**April 2006**

**BOUNDARY DESCRIPTION**

**Garfield and Kane counties** - Boundary begins at US-89A and the Utah-Arizona state line; north on US-89A to US-89; north on US-89 to SR-12; east on SR-12 to the Paria River; south along the Paria River to the Utah-Arizona state line; west along this state line to US-89A.

**LAND OWNERSHIP**

**RANGE AREA AND APPROXIMATE OWNERSHIP**

	Year-long range		Summer Range		Winter Range	
Ownership	Area (acres)	%	Area (acres)	%	Area (acres)	%
Forest Service	0	??	122705	37 %	8279	1%
Bureau of Land Management	0	??	76806	23 %	502742	85%
Utah State Institutional Trust Lands	0	??	19551	6 %	14011	2 %
Native American Trust Lands	0	??	0	0%	0	0%
Private	0	??	93122	28 %	48189	8 %
Department of Defense	0	??	0	0%	0	0%
USFWS Refuge	0	??	0	0%	0	0%
National Parks	0	??	17658	6%	15098	3 %
BLM Wilderness Area	0	??	0	0%	3269	1 %
Utah Division of Wildlife Resources	0	??	0	0%	0	0%
<b>TOTAL</b>	<b>0</b>	<b>??</b>	<b>329841</b>	<b>100%</b>	<b>591587</b>	<b>100%</b>

**UNIT MANAGEMENT GOALS**

Manage for a population of healthy animals capable of providing a broad range of recreational opportunities, including hunting and viewing. Balance deer herd impacts with human needs, such as private property rights, agricultural crops and local economies. Maintain the population at a level that is within the long term capability of the available habitat to support. Continue with limited entry hunting. Maintain cooperative DWR/landowner relationships, i.e. Paunsaugunt Landowners Association and Alton Cooperative Wildlife Management Unit.

**POPULATION MANAGEMENT OBJECTIVES**

- Target Winter Herd Size - The short term objective, for the 5-year life of this plan, is to achieve a target population size of 5,200 wintering deer (modeled number). If DWR range trend monitoring shows a recovery of winter range in this unit to the "fair" category in 2008, increase

population objective to long term level of 6,500 deer.

	Objective from past plan (2001)	Long-term Objective	2006-2011 Objective	Change
Paunsaugunt	6,500	6,500	5,200	- 1,300

- Herd Composition - Maintain three-year average post-season minimum buck to doe ratio of 35:100
- Buck Harvest – Maintain three-year average age of harvested bucks of 5.0 years.

#### **POPULATION MANAGEMENT STRATEGIES**

##### **Monitoring**

- Population Size - Herd composition and population size will be monitored through use of post-season and spring classification, hunter check stations, hunter harvest surveys and computer modeling.
- Buck Age Structure - Monitor age class structure of the buck population through the use of checking stations, post-season classification, uniform harvest surveys and field bag checks.
- Harvest - The primary means of monitoring harvest will be through the statewide mandatory harvest survey. The winter population should result in an expected annual buck harvest of 260 when normal conditions occur, but recognize that buck harvest will be above or below what is expected due to climatic and productivity variables. Buck harvest strategies will be developed through the RAC and Wildlife Board process to achieve management objectives for buck:doe ratios.

##### **Limiting Factors (May prevent achieving management objectives)**

- Crop Depredation -Take all steps necessary to minimize depredation as prescribed by state law and DWR policy.
- Habitat - The majority of range trends on the Paunsaugunt management unit were in a downward state in 2003. Of the 18 study transects sampled in 2003, only Moons Landing had an upward trend in any category (browse). All other trends were either stable or declining in all categories at the other study locations. The browse and herbaceous understory components were in the worst condition in 2003 as 14 sites had downward browse and herbaceous trends. Soil trends are declining on 10 sites and stable on 8 others. The primary factors influencing downward browse trends include decreasing key browse densities and young recruitment, reduced vigor, and increased decadence. The key browse species on most of the study sites are big sagebrush and antelope bitterbrush, with black sagebrush and serviceberry being important on select sites. Big sagebrush is represented by 2 subspecies, the basin and Wyoming varieties. Big sagebrush and/or black sagebrush was sampled on 16 of the 18 studies in the unit in 2003, and of these, percent decadence increased on 11 sites, remained stable on 3 sites, and declined on only two. Sagebrush recruitment declined on 14 of the 16 sites sampled in 2003. Bitterbrush was sampled on 12 transects in the unit with decadence increasing on 10 of these and recruitment declining on all 12.
- Predation - Refer to DWR predator management policy.
  - A predator management plan is currently in place for the benefit of mule deer on this unit.

- Seek assistance from USDA/Wildlife Services when deer populations are depressed and where there is a reasonable chance of gaining some relief through a predator control effort. Concentrate USDA/Wildlife Services control efforts during and immediately prior to the fawning period.

- Recommend cougar harvest to benefit deer while maintaining the cougar as a valued resource in its own right.

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Highway Mortality - Significant in several areas on U.S. 89, especially east of Kanab.

- Illegal Harvest - Specific preventive measures will be implemented through Action Plans developed in cooperation with the Law Enforcement Section should illegal kill become an identified and significant source of mortality.
- Cooperative Management - Approximately 25-30% of deer that summer on the Paunsaugunt Unit migrate south across the Utah/Arizona border to winter in Arizona. Continue cooperative program with Arizona Game and Fish Department for mutual harvest objectives.

### **HABITAT MANAGEMENT OBJECTIVES**

- Participate, as possible, with public and private land managers to rehabilitate and enhance important rangelands.
- Provide needed watering sources on critical wintering areas.
- Implement program for monitoring and reducing migratory highway mortality on U.S. 89 east of Kanab.
- Work with private and federal agencies to maintain and protect critical and existing winter range from future losses.

### **Condition of deer winter range on Unit 27, as indicated by DWR range trend surveys.**

Year	Mean DCI score for Unit	Classification	Unit-specific DCI score range: Poor	Unit-specific DCI score range: Fair	Unit-specific DCI score range: Good
1992	55	Fair	25-39	40-56	57-73
1997/98	53	Fair			
2003	33	Poor			

### **HABITAT MANAGEMENT STRATEGIES**

- Continue to monitor the permanent range trend studies located throughout the seasonal ranges.

- Planned or In Progress Projects:

DWR/BLM, two large water catchments on Buckskin Mountain and Five Mile Mountain

Pinyon and juniper reduction treatments began on Buckskin Mountain in the fall of 2005 and should continue annually in order to stabilize the downward trend of browse species on deer winter range.

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Other pinyon juniper reduction and sage brush restoration projects must occur on the winter ranges of the Paunsaugunt unit for this unit to be capable of supporting 6,500 wintering deer.

**Duration of Plan**

This unit management plan was approved by the Wildlife Board on \_\_\_\_\_ and will be in effect for five years from that date, or until amended.